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HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

| EXAMINER | |
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| BODAWALA, DIMPLE N | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/507,507 | OZASA ET AL. | |
| | Examiner | Art Unit | |
| | DIMPLE N. BODAWALA | 1791 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *15 January 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-19 and 26-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *9-11,31,33,37,39 and 40* is/are allowed.

6)☒ Claim(s) *1-8,12-19,26-32,34-36,38 and 41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/7/2010,2/25/2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. **Claims 1-6, 12-18, 26-28, 32, 34-36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. (US 5,783,126) in view of Doane et al. (US 6,040,063).**

3. As to claim 1, **Andersen et al.** discloses method for manufacturing articles, wherein method comprises steps of:

- Preparing **a slurry or dough molding material**, which is made by mixtures of starch, water and other material (See col.1 lines 51-60; col.4 lines 64-67; col.7 lines 21-27);
- selected **coating material** can be added to mixture prior to formation of the article (See col.10 lines 9-18; col.13 lines 37-42), wherein selected coating material comprises of biodegradable material (See col.49);
- **heating step** is carried out by a variety of ways such as electrical heating, **steam heating**, infrared light, etc. can be attached or directed at the molds, wherein heating medium such as steam can be piped through the molds to heat them (See col.45 lines 1-20), wherein such statement indicates that the heating step is **a steam expansion process** (See col.47 lines 36-47); and **press molding process** are capable to heat and mold the molding material in a mold having a given-shaped cavity to mold the molding material through the steam expansion (See col.45 lines 39 through col.46 lines 4);
- **a plurality of exhaust holes** (12, 14, 16, 18), wherein holes (14) are located on the mold (See figure 14), wherein such holes are capable to exhaust gas between molded article which is capable to have the coating film on the surface and the surface of the mold is capable to molded the article in desired shape (See figure 2, 14; col.18 lines 46-54; col.19 lines 8-12; col.23 lines 23-50).

4. Andersen et al. teaches to mold the moldable composition comprises mixture of biodegradable material and coating material through the steam expansion and press molding process as discussed above, but fails to teach or suggest that **coating film distinct from the molding material and placing into the mold with a molding material** as cited in claimed method.

5. **Doane et al. ('063)** discloses biodegradable article having lamination, wherein invention comprises interior layer (12) such as foam coated with **polyester layer (14) and other layer (16)** (See figure 2). It further teaches that coating of polyester material can be applied to the desired surface of the article by substantially any application technique such as spraying, brushing, **compression molding**, etc. (See col.4 lines 41-51), thus, such statements prove that the coating material is not mixed with foam material, but coating material is provided separately from the molding material, wherein **Compression molding technique** for applying coating material under pressure application, in order to pressure bond the film on the outer surface of the molding material (See figs 1-2; example 6). Doane et al. further teaches that **the polyester film is provided on the thermoformed ribbons of the starch foam material, and, then the molds heated to 100 degree C and then molds closed for about 10 seconds, in such process application, the laminate layer is melted and expanded into the surface of the foam material within the cavity, and, thus polyester film pressure bonded with the surface of molding material, and, enable to mold very moisture resistant, thermoformed composite article** (See examples 6; 11 and 14), wherein heating and compression process (See examples 6, 11 and 14) of Doane et al. obvious to suggest expansion of material and press bonding the coating material to the molding material as cited in claims.

6. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of **Andersen et al.** by providing coating material separately from the moldable material within the mold cavity,

wherein the coating film is melted and expanded into the surface of the thermoformed ribbons of starch foam material during the heating and pressing applications of the process, and, thus able to mold very moisture resistant, thermoformed articles (See example 14) as taught by **Doane et al. ('063),** wherein such article could be used in versatile applications.

7. As to claim As to claim 2, **Andersen et al.** further teaches that a space leading to the cavity through the exhaust hole is formed inside the mold, and in the heating and molding step, space is hermetically separated from outside the mold (See figure 19).

8. As to claims 3-5, 26-28, **Andersen et al.** further teaches that the hermetically separated space has a volume set between third and twice that of a void in the cavity before heating and molding (See figures 18-19). It further teaches that the gas existing between the coating film and a surface of the mold is discharged out of the mold through the holes (12, 16, 18) in the heating and molding step (See figure 2), Wherein the exhaust hole has a cross section between 0.12 mm^2 and 1.13 mm^2 (See col.23 lines 33-49).

9. As to claim 6, **Andersen et al.** discloses method for manufacturing articles, wherein method comprises steps of:

- Preparing **a slurry or dough molding material**, which is made by mixtures of starch, water and other material (See col.1 lines 51-60; col.4 lines 64-67; col.7 lines 21-27);
- selected **coating material** can be added to mixture prior to formation of the article (See col.10 lines 9-18; col.13 lines 37-42), wherein selected coating material comprises of biodegradable material (See col.49);
- **heating step** is carried out by a variety of ways such as electrical heating, **steam heating**, infrared light, etc. can be attached or directed at the molds, wherein heating medium such as steam can be piped through the molds to heat them (See col.45 lines 1-20); and **press molding process** are capable

to heat and mold the molding material in a mold having a given-shaped cavity to mold the molding material through the steam expansion (See col.45 lines 39 through col.46 lines 4), wherein such statement indicates that the heating step is **a steam expansion process** (See col.47 lines 36-47);

- Inside the mold of **a deep drawing shape** the molding material and the coating film being placed substantially flat for heating and molding the material into a deep drawing shape such as cup (See figures 9-10, and 18-19).

10. Andersen et al. teaches to mold the moldable composition comprises mixture of biodegradable material and coating material through the steam expansion and press molding process as discussed above, but fails to teach or suggest that **coating film distinct from the molding material and placing into the mold with a molding material** as cited in claimed method.

11. **Doane et al. ('063)** discloses biodegradable article having lamination, wherein invention comprises interior layer (12) such as foam coated with **polyester layer (14) and other layer (16)** (See figure 2). It further teaches that coating of polyester material can be applied to the desired surface of the article by substantially any application technique such as spraying, brushing, **compression molding**, etc. (See col.4 lines 41-51), thus, such statements prove that the coating material is not mixed with foam material, but coating material is provided separately from the molding material, wherein **Compression molding technique** for applying coating material under pressure application, in order to pressure bond the film on the outer surface of the molding material (See figs 1-2; example 6). Doane et al. further teaches that **the polyester film is provided on the thermoformed ribbons of the starch foam material, and, then the molds heated to 100 degree C and then molds closed for about 10 seconds, in such process application, the laminate layer is melted and expanded into the**

**surface of the foam material within the cavity, and, thus polyester film pressure bonded with the surface of molding material, and, enable to mold very moisture resistant, thermoformed composite article** (See examples 6; 11 and 14), wherein heating and compression process (See examples 6, 11 and 14) of Doane et al. obvious to suggest expansion of material and press bonding the coating material to the molding material as cited in claims.

12. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of **Andersen et al.** by providing coating material separately from the moldable material within the mold cavity, wherein the coating film is melted and expanded into the surface of the thermoformed ribbons of starch foam material during the heating and pressing applications of the process, and, thus able to mold very moisture resistant, thermoformed articles (See example 14) as taught by **Doane et al. ('063),** wherein such article could be used in versatile applications.

13. As to claims 7-8, 29-30, **Andersen et al.** discloses all claimed structural limitations as discussed above. It further teaches the coating film being deformed at desired temperature and figures show that concave and convex mold are closed to each other, but fails to teach or suggest steps of movement of the mold members as cited in claims 7-8 and 29-30. So, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Andersen et al. by providing steps of movement of concave and convex molds, while coating film is deforming, so that the coating film adhered to the surface of the molded articles properly, without any gap or pinholes, and, thus, able to produce article with good appearance.

14. As to claims 12, 32, **Andersen et al.** teaches that the mold can be heated in a variety of ways, which is used to vary the temperature of the molds along the length of the mold in order to vary the properties of the hardened matrix within the molded article (See col.45 lines 1-10). By varying the temperature and processing

time it is possible to affect the density, porosity and thickness of the surface layer or skin (See col.45 lines 11-15). It further teaches that the temperature of the mold has little, if any significant effect on the rate of formation of the cells after the drop in pressure (See col.21 lines 30-35). It further teaches that the heating is done so that mold has a temperature 150-220 C (See col.22 lines 37-54). On the other hand, secondary art, **Doane et al.** having coating of polyester, which having the melting point of 255 C, thus such statement indicates that the mold of the primary art is capable to soften the coating film (polyester) of secondary art at least 10C lower than the melting point of the coating film. It is not necessary that the prior art suggests expressly or in so many words the changes or possible improvements the inventor made but that the knowledge is clearly present. *In re Sernaker, 217 USPQ 1 (Fed. Cir. 1983).*

15. As to claim 13, **Andersen et al.** discloses method for manufacturing articles, wherein method comprises steps of:

- Preparing **a slurry or dough molding material**, which is made by mixtures of starch, water and other material (See col.1 lines 51-60; col.4 lines 64-67; col.7 lines 21-27);
- selected **coating material** can be added to mixture prior to formation of the article (See col.10 lines 9-18; col.13 lines 37-42), wherein selected coating material comprises of biodegradable material (See col.49);
- **heating step** is carried out by a variety of ways such as electrical heating, **steam heating**, infrared light, etc. can be attached or directed at the molds, wherein heating medium such as steam can be piped through the molds to heat them (See col.45 lines 1-20); and **press molding process** are capable to heat and mold the molding material in a mold having a given-shaped cavity to mold the molding material through the steam expansion (See col.45 lines 39 through col.46 lines 4), wherein such statement indicates that the heating step is **a steam expansion process** (See col.47 lines 36-47).

16. Andersen et al. teaches to mold the moldable composition comprises mixture of biodegradable material and coating material through the steam expansion and press molding process as discussed above, but fails to teach or suggest that **coating film distinct from the molding material and placing into the mold with a molding material** as cited in claimed method.

17. **Doane et al. ('063)** discloses biodegradable article having lamination, wherein invention comprises interior layer (12) such as foam coated with **polyester layer (14) and other layer (16)** (See figure 2). It further teaches that coating of polyester material can be applied to the desired surface of the article by substantially any application technique such as spraying, brushing, **compression molding**, etc. (See col.4 lines 41-51), thus, such statements prove that the coating material is not mixed with foam material, but coating material is provided separately from the molding material, wherein **Compression molding technique** for applying coating material under pressure application, in order to pressure bond the film on the outer surface of the molding material (See figs 1-2; example 6). Doane et al. further teaches that **the polyester film is provided on the thermoformed ribbons of the starch foam material, and, then the molds heated to 100 degree C and then molds closed for about 10 seconds, in such process application, the laminate layer is melted and expanded into the surface of the foam material within the cavity, and, thus polyester film pressure bonded with the surface of molding material, and, enable to mold very moisture resistant, thermoformed composite article** (See examples 6; 11 and 14), wherein heating and compression process (See examples 6, 11 and 14) of Doane et al. obvious to suggest expansion of material and press bonding the coating material to the molding material as cited in claims.

18. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of **Andersen et al.** by providing coating material separately from the moldable material within the mold cavity,

wherein the coating film is melted and expanded into the surface of the thermoformed ribbons of starch foam material during the heating and pressing applications of the process, and, thus able to mold very moisture resistant, thermoformed articles (See example 14) as taught by **Doane et al. ('063),** wherein such article could be used in versatile applications.

19. **Andersen et al.** teaches that the mold can be heated in a variety of ways, which is used to vary the temperature of the molds along the length of the mold in order to vary the properties of the hardened matrix within the molded article (See col.45 lines 1-10). By varying the temperature and processing time it is possible to affect the density, porosity and thickness of the surface layer or skin (See col.45 lines 11-15). It further teaches that the temperature of the mold has little, if any significant effect on the rate of formation of the cells after the drop in pressure (See col.21 lines 30-35). It further teaches that the heating is done so that mold has a temperature 150-220 C (See col.22 lines 37-54). On the other hand, secondary art, **Doane et al.** having coating of polyester, which having the melting point of 255 C, thus such statement indicates that the mold of the primary art is capable to soften the coating film (polyester) of secondary art at least 10C lower than the melting point of the coating film. It is not necessary that the prior art suggests expressly or in so many words the changes or possible improvements the inventor made but that the knowledge is clearly present. *In re Sernaker, 217 USPQ 1 (Fed. Cir. 1983).*

20. As to claims 14-15, 34-35, **Andersen et al.** teaches that the heating is done so that mold has a temperature 150-220 C (See col.22 lines 37-54).

21. As to claims 16-17, 36, **Andersen et al.** further teaches that the molds are made of metal along with TEFLON coating (See col.44 lines 59-65), which inherently suggests that the surface of the mold is coated with slip agent such as PTFE as fluoropolymer which is in contact with biodegradable molding material during the molding process.

22. As to claims 18, 38, **Andersen et al.** further teaches that the coating film is a film mainly made of denatured polyester (See section of "coating film" col.49 lines 35 through col. 50 lines 2).

23. **Claims 19 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. (U S Patent No. 5,783,126) in view of Doane et al. (US 6,040,063) and further in view of Okazaki et al. (EP 0679509 A2).**

24. Andersen et al. and/or Doane et al. disclose all claimed limitations as discussed above, but fail to teach or suggest the coating film is a biaxially stretched film.

25. **Okazaki et al. ('509)** disclose biaxially oriented laminated film as a biaxially stretched film with excellent scratch resistance, and friction property as well as excellent dubbing resistance (See abstract).

26. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention Andersen et al. ('214) and/or Doane et al. by providing a biaxially stretched film as coating film because the biaxially stretched film having excellent scratch resistance, dubbing resistance and friction property, wherein utility of the film prevents the article to degrade in high temperature, and, thus, able to maintain high quality image of the molded article as suggested by Okazaki et al.

***Allowable Subject Matter***

27. **Claims <u>9-11, 31, 33, 37, 39 and 40</u> are allowed.**

28. The following is an examiner's statement of reasons for allowance: The prior arts of record fails to teach or suggest a method of manufacturing the biodegradable articles as defined in claims of the instant application. The closet prior arts Andersen et al. (U S Patent No. 5,783,126), Okazaki et al. (EP 0679509 A2) and Ozasa et al. (U.S. Patent No. 7,332,214) fail to teach or suggest the method step of a central part of the coating film being deformed by moving the convex and concave molds in a direction, wherein these molds are fit and at least

while the coating film is being deformed a relative moving speed of the convex mold to a plane formed by connecting a surface of non-deforming parts on an outer periphery of the coating film being maintained from 8 mm/s to 12 mm/s as defined in claim 9 of the instant application. None of prior arts of record, taken alone or in combination, inter alia teaches or fairly suggests the limitation of apparatus as set forth in the claims of the instant application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

29. For combination rejection of claims over **Andersen et al. (US 5,783,126) and Doane et al. (US 6,040,063)**, wherein Applicant argues that **Anderson et al. ('126)** fails to disclose providing a coating film distinct from the molding material or placing the molding material and the coating film into a mold having a given-shaped cavity as cited in the claims of the instant application. Applicant further argues that **Anderson et al. ('126)** fails to teach ***pressure bonding of the coating film to a surface of a biodegradable expanded molded article through the steam expansion molding*** as cited in claims, but rather the mold is solely heated through the steam. Applicant argues that **Anderson et al. ('126)** describes a coating material that melts to cover the surface of a mixture while the molding material is being heated if the coating material is added through expansion and at the same time melt a coating material to form a coating film. Applicant further argues that **Anderson et al. ('126)** does not teach or suggest "***to mold slurry or dough molding material through steam expansion, and at the same time soften and pressure-bond the coating film to a surface of a biodegradable expanded molded article***" as cited in claims. Applicant argues that **Doane et al. ('063)** states that the hydroxyl-functional polyester is adherently carried on the surface of the self-

supporting structure and that the polyester self-adhere to the surface through brushing, dipping, spraying, compression molding, co-extruding and hot roll laminating, none of which includes ***a steam expansion molding method*** as cited in claims. Applicant further argues that the disclosure of **Doane et al. ('063)** does not suggest ***combining the slurry or dough molding material and the coating film in the mold***.

30. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Andersen et al. discloses an invention method for manufacturing articles, wherein method comprises **a slurry or dough molding material**, which is made by mixtures of starch, water and other material (See col.1 lines 51-60; col.4 lines 64-67; col.7 lines 21-27); and selected **coating material** can be added to mixture prior to formation of the article (See col.10 lines 9-18; col.13 lines 37-42), wherein selected coating material comprises of biodegradable material (See col.49). It further teaches that the invention comprises **heating step** is carried out by a variety of ways such as electrical heating, **steam heating**, infrared light, etc. can be attached or directed at the molds, wherein heating medium such as steam can be piped through the molds to heat them (See col.45 lines 1-20); and **press molding process** are capable to heat and mold the molding material in a mold having a given-shaped cavity to mold the molding material through the steam

expansion (See col.45 lines 39 through col.46 lines 4), wherein such statement indicates that the heating step is **a steam expansion process** (See col.47 lines 36-47). Thus, **Andersen et al. teaches to mold the material consisting a mixture of biodegradable material and coating material through the steam expansion and press molding process as discussed above**, but fails to teach or suggest that **coating film distinct from the molding material and placing into the mold with a molding material** as cited in claimed method, wherein such lacking of primary art would be modified by providing teaching of **Doane et al. ('063)** discloses biodegradable article having lamination, wherein invention comprises interior layer (12) such as foam coated with **polyester layer (14) and other layer (16)** (See figure 2). It further teaches that coating of polyester material can be applied to the desired surface of the article by substantially any application technique such as spraying, brushing, **compression molding**, etc. (See col.4 lines 41-51), thus, such statements indicate that the coating material is not mixed with foam material, but coating material is provided separately from the molding material. Furthermore, **Compression molding technique** for applying coating material of Doane et al. inherently teaches that the invention is capable to apply the coating film with desired press bond on the surface molding material into a mold during molding process, in order to give desired shape of the article (See example 6). Doane et al. further teaches that the **polyester film is provided on the thermoformed ribbons of the starch foam material, and, then the molds heated to 100 degree C and then molds closed (which suggests the application of pressure) for about 10 seconds, in such process application, the laminate layer is melted and expanded into the surface of the foam material within the cavity, and, thus able to mold very moisture resistant, thermoformed articles** (See examples 6; 11 and 14), thus, such statement indicates that the invention of Doane et al. is capable to apply the coating material on the surface of the molding material by using heat expansion; and pressure bonding process, in order to melt

or soften the coating layer and press bonding on the surface of the molding material as claimed. Applicant's all arguments are fully considered, but they are not found persuasive, and, therefore, rejection of claims has **been maintained**.

***Pertinent arts***

31. **Loercks et al. (WO 94/05492)** discloses an invention related to provide bonding material on the base of strong foam, wherein the layer of bonding material comprises at least one layer of hardened strong foam, such as, starch, with at least an other material, such as, textile, veneer, leather, synthetic film, or combination thereof (See translation). It further teaches that the invention comprises molding tool comprises lower mold comprising tray shaped cavity is filled with a foam layer and a laminate layer is located on one side of the foam layer; and then the dies of the tool is closed and operated under controlled temperature and pressure expansion form plant, in order to expand the material, and, thus able to exhibit the bondable article with high mechanical strength, wherein such article could be used in the versatile application (See abstract and translation).

32. **Idetsuki (WO 83/01595, cited by Applicant on PTOL-1449 form, submitted on 1/7/2010)** discloses an invention related to vacuum molding process for producing composite molded article (See abstract).

33. **Takai et al. (US 6,440,354 cited by Applicant on PTOL-1449 form, submitted on 1/7/2010)** discloses an invention related to thermoforming process for forming softened thermoplastic resin sheet (See abstract).

***Conclusion***

34. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIMPLE N. BODAWALA whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. N. B./

Examiner, Art Unit 1791

/Philip C Tucker/

Supervisory Patent Examiner, Art Unit 1791